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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,710	06/26/2001	Asher Hazanchuk	ALT.P001	1818
27296	7590	12/02/2008	EXAMINER	
LAWRENCE M. CHO			AHN, SAM K	
P.O. BOX 2144			ART UNIT	
CHAMPAIGN, IL 61825			PAPER NUMBER	
			2611	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/891,710

Applicant(s)

HAZANCHUK, ASHER

Examiner

SAM K. AHN

Art Unit

2611

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-15, 17-23, 25-27, 29-35 and 37-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-15, 17-23, 25-27 and 29-32 is/are rejected.
- 7) ☒ Claim(s) 33-35 and 37-50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see p.11-21, filed 08/18/08, with respect to 103(a) rejection of claims 1-9,11-15,17-23,25-27,29-35 and 37-50 have been fully considered and are persuasive. The rejection of the claims has been withdrawn.

Claim Objections

2. Claims 14,15,17-23,25-27,29-35 and 37-50 are objected to because of the following informalities:

In claim 14, line 3, "where n is " should be "wherein n and L are".

In claim 26, line 3, "where n is " should be "wherein n and L are" and define "d".

In claim 33, line 5, "where n is " should be "wherein n and L are" and define "d".

In claim 39, line 5, "where n is " should be "wherein n and L are" and define "d".

In claim 46, line 4, "where n is " should be "wherein n and L are".

Claims 15,17-23,25,27,29-32,34,35,37,38,40-45 and 47-50 depend on one of the objected claims. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim(s) 1-9,11-15,17-23,25-27,29-32 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite

a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101"). The instant claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

In each of the independent claims above, the claims recite what appears to be a series of steps. However, the steps are not tied to another statutory class, such as a hardware performing any one of the steps. Therefore, the claims are directed to non-statutory subject matter.

Allowable Subject Matter

4. Claims 33-35 and 37-50 would be allowable if rewritten or amended to overcome the claim objections, set forth in this Office action.
5. The following is a statement of reasons for the indication of allowable subject matter: prior art does not teach or suggest in combination of a correlator unit, comprising: a plurality of code sequence registers, a plurality of sample registers, a processing unit, an accumulation unit and a correlation output processor where each of the code sequence groups is processed to generate intermediate correlation values during a different clock cycle; a correlation output processor that determines a

synchronization point that identifies an amount of delay incurred from transmission of the sample sequences from the correlation output.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bahai et al. US 6,522,706 B1 teach determining delay estimation based on correlation results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sam K. Ahn/
Primary Examiner, Art Unit 2611

12/3/2008